AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A touch probe, including [[.]] a casing [[(1)]] that defines a longitudinal geometric axis, [[.]] a movable arm-set [[(3)]], housed in the casing [[(1)]], [[.]] an arm [[(13)]] rigidly coupled to the movable arm-set [[(3)]] with an end extending out of the casing, [[.]] a feeler [[(15)]] coupled to said end of the arm [[(13)]], and [[.]] and electric switch [[(31)]] adapted for detecting displacements of the movable arm-set [[(3)]] with respect to the casing [[(1)]], and including [[.]] at least a stationary contact[[(44,45)]] and a movable contact [[(51), [[.]] a housing [[(33)]] enclosing said stationary contact [[(44,45)]] and said movable contact [[(51)]] and a contact protective fluid, and [[.]] a mechanical transmission device [[(61)]] adapted for transmitting displacements of the movable arm-set [[(3)]] to the movable contact [[(51), characterized in that]] wherein the casing [[(1)]] encloses a sealingly closed chamber [[(19,22,34,35)]], the housing [[(33)]] of the electric switch [[(31)]] lying at the interior of said sealingly closed chamber [[(19,22,34,35)]], said contact protective fluid being an inert gas that is present in the sealingly closed chamber [[(19,22,34,35))]].

2. (Original) The probe according to claim 1, wherein said inert gas is nitrogen.

3. (Currently Amended) The probe according to claim 1 [[or claim 2]], including an antirotation device adapted for preventing rotations of the movable arm-set [[(3)]] with respect to the casing [[(1)]] about a longitudinal axis, said antirotation device including a metal bellows [[(19)]] fixed to the ends of the movable arm-set [[(3)]] and to a mechanical coupling element [[(20)]], rigidly coupled to the casing [[(1)]], the metal bellows [[(19)]] defining at least in part said sealingly closed chamber [[(19,22,34,35)]].

4. (Currently Amended) The probe according to [[one of the]] claim [[s]] 1 [[to 3]], wherein the movable arm-set [[(3)]] defines an axial through hole [[(27)]]

communicating with said sealingly closed chamber [[(19,22,34,35)]], the inert gas being inserted in the sealingly closed chamber [[(19,22,34,35)]] through said axial through hole [[(27)]].

5. (Currently Amended) The probe according to claim 4, further including a closure screw [[(28)]] and a ring gasket [[(29)]], wherein the axial through hole [[(27)]] includes at least a threaded area, the closure screw [[(28)]] being adapted to be coupled to said at least one threaded area and to lock the ring gasket [[(29)]] for achieving the sealing of the axial through hole [[(27)]].

6. (Currently Amended) The probe according to [[one of the]] claims[[s]] 1 [[to 5]], wherein the mechanical transmission device [[(61)]] of the electric switch [[(31)]] includes an elongate mechanical body [[(63)]] between the movable arm-set [[(3)]] and the movable contact [[(51)]], substantially longitudinal guide surfaces [[(70-72)] and an elastic thrust element [[(73)]] adapted for urging the elongate mechanical body [[(63)]] against said guide surfaces [[(70-72)]].

7. (Currently Amended) The probe according to claim 6, wherein the elastic thrust device includes a bent flat spring [[(73)]] and the elongate mechanical body [[(63)]] includes a transmission element [[(67)]] with a substantially spherical shape adapted for cooperating with the substantially longitudinal guide surfaces [[(70-72)]] urged by the bent flat spring [[(73)]], the transmission element [[(67)]] including a substantially plane portion [[(77)]] adapted for cooperating with said bent flat spring [[(73)]].

8. (Currently Amended) The probe according to [[one of the]] claim[[s from]] 1 [[to 7]], wherein the movable arm-set [[(3)]] is supported in the casing [[(1)]] by means of a cone-ball coupling [[(9,5)]] the movable arm-set and the casing defining annular surfaces [[(7,11)]] adapted to mutually contact and to cause, further displacements of the arm [[(13)]], longitudinal displacements of the movable arm-set

[[(3)]] suitable for being transmitted, by means of said mechanical transmission device [[(61)]], to the movable contact [[(51)]] of the electric switch [[(31)]].

9. (Currently Amended) The probe according to [[one of the]] claim [[s from]] 1 [[to 7]], wherein the movable arm-set [[(3)]] is supported in the casing [[(1)]] by a coupling between plane annular surfaces [[(7,11)]], the movable arm-set [[(3)]] and the casing [[(1)]] defining, respectively, a substantially spherical portion [[(9)]] and a substantially frusto-conical seat [[(5)]] adapted to mutually contact and to cause, further to displacements of the arm [[(13)]], the partial disengagement between the plane annular surfaces [[(7,11)]] and the consequent longitudinal displacements of the movable arm-set [[(3)]] suitable for being transmitted, by means of said mechanical transmission device [[(61)]], to the movable contact [[(51)]] of the electric switch [[(31)]].

10. (Currently Amended) The probe according to [[one of the]] claims [[s from]] 1 [[to 9]], wherein the electric switch [[(31)]] includes a spring [[(53)]] for urging the movable contact [[(51)]] against said at least one stationary contact [[(44,45)]].

11. (Currently Amended) The probe according to claim 10, wherein said electric switch [[(31)]] includes at least two stationary contacts [[(44,45)]], said spring [[(53)]] being adapted for urging the movable contact [[(51)]] against the two stationary contacts [[(44,45)]].